

WHAT IS CLAIMED IS:

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1. A method of generating an output document from document information composed of a plurality of elements, said method comprising the steps of:

- 10 evaluating a degree of significance for each element included in said document information;
selecting an element among said plurality of elements in a decreasing significance order; and
placing the element on said output document.

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2. The method as claimed in claim 1, further comprising the step of outputting said output document
20 to an image outputting device or an image transmission device.

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3. The method as claimed in claim 2, wherein said image outputting device is a printing device or a display device, and said image transmission device is a facsimile device.

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4. The method as claimed in claim 1, further comprising the step of evaluating the degree of significance for said each element included in said document information, based on significance defining information described in said document information.

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5. The method as claimed in claim 1, further comprising the step of evaluating the degree of significance for said each element included in said document information, based on a fixed significance-evaluating standard.

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6. The method as claimed in claim 1, further comprising the step of limiting the element to be placed on said output document, based on a predetermined page size and a predetermined number of pages of said output document.

10 7. The method as claimed in claim 6, further comprising the step of limiting the element to be placed on said output document so that a total space occupied by one or a plurality of selected elements on said output document is less than or equal to a space limit
15 determined by the page size and the number of pages.

20 8. The method as claimed in claim 7, further comprising the steps of:
continuing selecting the element until said total space exceeds said space limit; and
eliminating a most-recently selected element
25 from said output document.

9. The method as claimed in claim 7, further comprising the steps of:

continuing selecting the element until said total space exceeds said space limit;

5 reducing a size of at least a part of said one or said plurality of selected elements so that said total space becomes less than or equal to said space limit; and

10 placing said one or said plurality of selected elements on said output document.

15 10. A method of reducing an information content of document information composed of a plurality of elements, said method comprising the steps of:

evaluating a degree of significance for each element included in said document information; and

20 carrying out an operation to said each element, said operation corresponding to the degree of significance of said each element.

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11. The method as claimed in claim 10,
further comprising the step of evaluating the degree of
significance for said each element, based on
significance defining information described in said
5 document information.

10 12. The method as claimed in claim 10,
further comprising the step of evaluating the degree of
significance for said each element, based on a fixed
significance-evaluating standard.

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13. The method as claimed in claim 10,
further comprising the step of eliminating an element
20 whose degree of significance is lower than a specific
significance level.

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14. The method as claimed in claim 13,
wherein said specific significance level differs with an
attribute of said each element.

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15. The method as claimed in claim 14,
wherein the specific significance level of a non-text
10 element is higher than that of a text element.

15 16. The method as claimed in claim 10,
further comprising the steps of:
keeping a text element; and
eliminating a non-text element.

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17. The method as claimed in claim 10,
further comprising the step of compressing a non-text
25 element by using a compression method corresponding to

the degree of significance of said non-text element.

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18. The method as claimed in claim 10,
further comprising the step of compressing a non-text
element at a compression rate corresponding to the
degree of significance of said non-text element.

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19. The method as claimed in claim 10,

15 further comprising the steps of:

eliminating a text element whose degree of
significance is lower than a first significance level;
and

compressing a non-text element whose degree of
20 significance is lower than a second significance level.

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20. A document-information processing device,

comprising:

an input unit inputting document information composed of a plurality of elements, from a document information source;

5 an evaluation unit evaluating a degree of significance of each element included in said document information; and

a process unit selecting an element among said plurality of elements in a decreasing significance order,
10 and generating an output document, on which a plurality of selected elements are placed in the decreasing significance order.

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21. The document-information processing device as claimed in claim 20, further comprising an output unit outputting said output document to an image
20 outputting device or an image transmission device.

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22. The document-information processing

device as claimed in claim 21, wherein said image outputting device is a printing device or a display device, and said image transmission device is a facsimile device.

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23. The document-information processing device as claimed in claim 20, wherein said evaluation unit evaluates the degree of significance for said each element included in said document information, based on significance defining information described in said document information.

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24. The document-information processing device as claimed in claim 20, wherein said evaluation unit evaluates the degree of significance for said each element included in said document information, based on a fixed significance-evaluating standard.

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25. The document-information processing device as claimed in claim 20, wherein said process unit limits the element to be placed on said output document, based on a predetermined page size and a predetermined number of pages of said output document, which are specified by output constraint information.

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26. The document-information processing device as claimed in claim 25, wherein said process unit limits the element to be placed on said output document so that a total space occupied by said plurality of selected elements on said output document is less than or equal to a space limit determined by the page size and the number of pages.

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27. The document-information processing device as claimed in claim 26, wherein said process unit continues selecting the element until said total space exceeds said space limit, and eliminates a most-recently

selected element from said output document.

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28. The document-information processing device as claimed in claim 26, wherein said process unit continues selecting the element until said total space exceeds said space limit, and reduces a size of at least
10 a part of said plurality of selected elements so that said total space becomes less than or equal to said space limit.

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29. The document-information processing device as claimed in claim 20, wherein said document-information processing device includes said document
20 information source.

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30. The document-information processing

device as claimed in claim 20, wherein said document-
information processing device is connected to said
document information source through a network.

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31. The document-information processing
device as claimed in claim 21, wherein said document-
10 information processing device includes said image
outputting device or said image transmission device.

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32. The document-information processing
device as claimed in claim 21, wherein said document-
information processing device is connected to said image
outputting device or said image transmission device
20 through a network.

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33. The document-information processing

device as claimed in claim 25, further comprising a setting unit setting said output constraint information.

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34. The document-information processing device as claimed in claim 25, wherein said output constraint information is set through a network.

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35. A document-information processing device,
15 comprising:

an input unit inputting document information composed of a plurality of elements, from a document information source;

an evaluation unit evaluating a degree of
20 significance of each element included in said document information; and

a process unit reducing an information content of said document information by carrying out an operation to said each element, said operation
25 corresponding to the degree of significance of said each

element.

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36. The document-information processing device as claimed in claim 35, further comprising an output unit outputting said document information whose information content is reduced, to a storage device.

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37. The document-information processing device as claimed in claim 35, wherein said evaluation unit evaluates the degree of significance for said each element, based on significance defining information described in said document information.

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38. The document-information processing device as claimed in claim 35, wherein said evaluation unit evaluates the degree of significance for said each

element, based on a fixed significance-evaluating standard.

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39. The document-information processing device as claimed in claim 35, wherein said process unit eliminates an element whose degree of significance is
10 lower than a specific significance level.

40. The document-information processing device as claimed in claim 39, wherein said specific
15 significance level differs with an attribute of said each element.

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41. The document-information processing device as claimed in claim 40, wherein the specific
25 significance level of a non-text element is higher than

that of a text element.

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42. The document-information processing device as claimed in claim 35, wherein said process unit keeps a text element, and eliminates a non-text element.

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43. The document-information processing device as claimed in claim 35, wherein said process unit compresses a non-text element by using a compression method corresponding to the degree of significance of said non-text element.

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44. The document-information processing device as claimed in claim 35, wherein said process unit compresses a non-text element at a compression rate corresponding to the degree of significance of said non-

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text element.

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45. The document-information processing device as claimed in claim 35, wherein said process unit eliminates a text element whose degree of significance is lower than a first significance level, and compresses
10 a non-text element whose degree of significance is lower than a second significance level.

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46. The document-information processing device as claimed in claim 35, wherein said document-information processing device includes said document
information source.

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47. The document-information processing
25 device as claimed in claim 35, wherein said document-

information processing device is connected to said document information source through a network.

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48. The document-information processing device as claimed in claim 36, wherein said document-information processing device includes said storage
10 device.

49. The document-information processing device as claimed in claim 36, wherein said document-information processing device is connected to said storage device through a network.
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50. A recording medium readable by a computer, tangibly embodying a program of instructions executable
25 by the computer to generate an output document from

document information composed of a plurality of elements,
said program comprising the steps of:

evaluating a degree of significance for each
element included in said document information;

5 selecting an element among said plurality of
elements in a decreasing significance order;

placing the element on said output document;

and

outputting said output document to an image

10 outputting device or an image transmission device.

15 51. A recording medium readable by a computer,
tangibly embodying a program of instructions executable
by the computer to reduce an information content of
document information composed of a plurality of elements,
said program comprising the steps of:

20 evaluating a degree of significance for each
element included in said document information; and

carrying out an operation to said each element,
said operation corresponding to the degree of
significance of said each element.

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